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REMARKS

With this amendment, claims 1-12 are currently pending in the application. The applicant would like to thank the Examiner for the Minor Claim Suggestions in paragraph 2 of the Office Action, all of which are believed to be addressed herein. No new matter has been added.

Claim 1

Claim 1 has been rejected as unpatentable under 35 U.S.C. § 103 over McDougal (U.S. Patent No. 3,072,137) in view of Aghnides (U.S. Patent No. 4,534,513) and Walker (U.S. Patent No. 3,485,454).

Claim 1 has been amended to include the following limitations, none of which appear in the prior art:

- the dosing device comprises a one-piece body with a main flow conduit extending through that body;
- the aerator is located in the main flow conduit in order to serve a two-fold function, namely to promote mixing of the dosing liquid with the main liquid stream and also to aerate the mixed stream;
- the second inlet (i.e. the inlet through which dosing liquid is drawn into the main liquid stream) includes an inlet spigot to which a dosing liquid conduit extending from the source of dosing liquid can be connected, with a fixed orifice flow control nozzle located replaceably in the inlet spigot to control the flow of dosing liquid through the second inlet.

The McDougal, Aghnides and Walker references do not disclose these features of the invention as describe in amended Claim 1. With regard to the body of the present dosing device being a one-piece body, it is submitted that such an arrangement is advantageous from the point of view of manufacturing cost. Referring, for instance, to McDougal, the body of

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the device is composed of a number of separately manufactured parts which must be connected together. The body of the device described in Claim 1 simply comprises a single cylindrical member in which the various internal cavities can be formed by simple machining operations. Apart from screwing in the inlet spigot 24 and control valve unit, no complicated assembly steps have to be carried out.

With regard to the aerator, it is noted in Claim 1 as amended that this component serves the important function of enhancing the mixing of the dosing liquid with the liquid in the main flow stream. In an application such as that wherein which detergent is mixed with water for the purposes of washing crockery and cutlery in a commercial catering operation, it is obviously important to economize as far as possible on the amount of detergent which is used, and it is only by ensuring that there is proper mixing of the detergent with the water that the necessary economy can be achieved. It is respectfully submitted that the Examiner is mistaken in saying that the aerator is included in the dosing device of the present invention merely to "soften" the flow exiting from the faucet, since this ignores the important function of enhancing the mixing process. Clearly, neither Agnides nor any of the cited references disclose a dual function aerator as claimed.

The configuration of the inlet spigot and fixed orifice flow control nozzle located replaceably in that inlet spigot are also features of the claimed dosing device that distinguish it from the prior art. In practice, the orifice size for a particular application would be chosen in accordance with the actual operating parameters, such as the desired ration of dosing liquid to main liquid, main liquid pressure, the nature of the dosing liquid and main liquid, and so on. Once the necessary selection has been made, the selected nozzle is fitted into the inlet spigot and is thereafter covered by the hose which is fitted over the nozzle and spigot. This provides some security against inadvertent and unauthorized adjustment of the mix ratio and, once again, enables the present invention to achieve suitable economy in the consumption of dosing liquid. On the contrary, the prior art merely discloses screw

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adjustment mechanisms for adjusting the mix ratio. This in turn makes it a simple procedure for the mix ratio to be varied in an unauthorized manner, which is highly undesirable.

Claims 2-8

Claims 2-8 are all dependent from Claim 1 and therefore believed to be allowable in view of the amendments to Claim 1 and the arguments described above.

In addition, amended claim 2 specifies the preferred configuration of the control valve in which there is an O-ring which seats on a seat defined by a surface surrounding the passage. This simple and effective arrangement is not disclosed in the cited references. Amended claim 7 specifies that the spanner-engagable flats are located below the second inlet and the passage to facilitate threaded fixture of the dosing device to a threaded faucet. With regard to original claim 7 the Examiner cited the McDougal document. The McDougal document does indeed disclose flat surfaces 31 but it will be understood from a reading of McDougal, column 2, lines 49 to 58, that the flat surfaces 31 are not provided for spanner engagement. The location of the surfaces would in any event be highly unsuitable for spanner engagement since they are at the same level as the inlet 50 and valve 43. This means that if a spanner is incorrectly applied to the surfaces 31, damage could easily be caused either to the inlet or the control valve. This problem is avoided entirely in the present invention by locating the spanner flats 62 below the inlet and control valve.

Claim 9

Claim 9 has been added by amendment to the present application. Claim 9 describes a dosing device comprising a nonreturn valve located in the inlet spigot at the second inlet through which dosing liquid is drawn into the main flow stream. As explained on page 6 of the present patent specification, this feature ensures that the supply hose through which dosing liquid is supplied is maintained full of dosing liquid, such that dosing of the main flow can commence as soon as the main flow is re-established and the button 34 is

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depressed, i.e. the hose is kept in a primed condition. In the absence of a non-return valve, dosing liquid could flow back to its source. This in turn means that when low pressure conditions are re-established in the main flow passage, the main flow would have to continue for some time before the dosing liquid is drawn into that flow. Thus, the initial part of the flow would contain no dosing liquid. In a typical situation where the dosing liquid is detergent which is drawn into a main water flow for the purposes of creating a mixture suitable for washing of commercial catering implements, the main liquid flow would normally be introduced into a washing up bowl or the like. The absence of detergent in the initial part of the flow would result in a situation that the overall concentration of detergent in the mixture in the bowl is less than that required to perform a proper washing operation.

An added advantage of the claimed location of the non-return valve is the fact that the resulting structure is particularly compact and so would not interfere markedly with movements close to the dosing device.

It is noted that the Examiner relies on the Walker reference for a description of the incorporation of a non-return valve in the dosing liquid supply tube, but there is clearly no disclosure of the advantageous, preferred location of the non-return valve as set forth in new Claim 9. With reference to the above, it is submitted that new Claim 9 is patentable over the cited references.

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CONCLUSION

Applicant respectfully submits that claims 1-12, as amended, are in condition for immediate allowance, and requests early notification to that effect. If any issues remain to be resolved, the Examiner is respectfully requested to contact the undersigned attorney for the Assignee at 404.532.6959 to arrange for a telephone interview prior to issuance of an Office action.

Respectfully submitted,



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Our Docket: 46669/330298